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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/658,541
Filing Date	09/08/2003
First Named Inventor	LaBelle et al.
Art Unit	1645
Examiner Name	Kosson, Rosanne
Attorney Docket Number	9138-0092US

Sheet 1 of 5

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
f.v.	1.	US- 3,935,031	01/27/1976	Adler	
	2.	US- 4,103,064	07/25/1978	McAlear et al.	
	3.	US- 4,149,902	04/17/1979	Mauer et al.	
	4.	US- 4,190,950	03/04/1980	Skotheim	
	5.	US- 5,466,301	11/14/1995	Hammerbacker et al.	
	6.	US- 5,504,573	04/02/1996	Cheiky-Zelina	
	7.	US- 5,573,909	11/12/1996	Singer et al.	
	8.	US- 5,711,915	01/27/1998	Siegmund et al.	
	9.	US- 5,976,892	11/02/1999	Bisconte	
	10.	US- 6,079,415	06/27/2000	Bernerd et al.	
	11.	US- 6,342,389	01/29/2002	Cubiciotti	
	12.	US- 6,476,312	11/05/2002	Barnham	
	13.	US- 6,538,191	03/25/2003	MacDonald	
	14.	US- 6,603,069	08/05/2003	Muhs et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁴
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				

Examiner Signature	<i>Rosanne Kosson</i>	Date Considered	8/16/04
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B.L.	15	ANDERSON, B.B. et al. "Grating Light Reflection Spectroscopy for Determination of Bulk Refractive Index and Absorbance" Anal. Chem. 1996, 68, 1081-1088.	
	16	BORREGO, C.M. et al. "Light intensity effects on pigment composition and organisation in.. " Photosynthesis Research 59; 159-166, 1999, Kluwer Academic Publishers, Netherlands.	
	17	BUNCE, J.A. "Acclimatin to temperature of the response of photosynthesis to increased ..." Photosynthesis Research 64; 89-94, 2000, Kluwer Academic Publishers, Netherlands.	
	18	CEDENO, C.C. et al. "Nanoimprint lithography for organic electronics" Microelectronic Enginnering 61-62, 2002 25-31.	
	19	DRAGOMAN, D. et al. "Optical modelling of quantum dots" Optics Communications 150, 1998, 331-338.	
	20	FENDLER, J.H. "Self-assembled nanostructured materials" Chem. Mater. 1996, 8, 1616-1624.	
	21	FOIDL, M. et al. "PHototrophic growth and chlorosome formation in Chloroflexus ..." Photosynthesis Research 54, 219-226, 1997, Kluwer Academic Publishers, Netherlands.	
	22	GILARDI, G. et al. "Manipulating redox systems: applicatin to nanotechnology" TRENDS in Biotechnology Vol. 19 No. 11, Nov. 2001.	
	23	GREEN, M.A. "Prospects for photovoltaic efficiency enhancement using low-dimensional structures" Nanotechnology 11, 2000, 401-405, printed in the UK.	
	24	HALL, D.J. "An experimental approach to the dynamics of a natural population of Daphnia Galeata Mendotae" Ecology, Vol. 45, 1, Jan. 1964, 94-112.	

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f.k.	25	HE, J. et al. "Structure and optical properties of self-assembled InAs/GaAs quantum dots with..." Journal of Crystal Growth 240, 2002, 395-400.	
	26	HE, Jin-An et al. "Bacteriorhodopsin thin film assemblies - immobilization, properties and applications" Adv. Mater. 1999, 11, No. 6, 435-446.	
	27	INOUE, N. et al. "Effects of high-temperature treatments on a thermophilic Cyanobacterium Synechococcus vulcanus" Plant Cell Physiol. 41(4); 515-522 (2000).	
	28	KOTI, A.S.R. et al. "Self-Assembly of Template-Directed J-Aggregates of Porphyrin" Chemistry of Materials Vol. 15 No. 2, Jan. 28, 2003.	
	29	MURAMATSU, K. et al. "Two-Dimensional Assemblies of Colloidal SiO ₂ and TiO ₂ Particles Prepared by the ..." Journal of Colloid and Interface Science 242, 127-132 (2001).	
	30	MARUYAMA, T. et al. "Energy conversion efficiency of solar cells coated with fluorescent coloring agent" Solar Energy Materials & Solar Cells 56 (1998) 1-6.	
	31	MARUYAMA, T. et al. "Wedge-shaped light concentrator using total internal reflection" Solar Energy Materials & Solar Cells 57 (1999) 75-83.	
	32	NARAYAN, K.S. et al. "Dual function hybrid polymer-nanoparticle devices" Applied Physics Letters Vol. 74 No. 6, 8 February 1999.	
	33	OLIVE, J. et al. "Ultrastructure and light adaptation of phycobilisome mutants of Synechocystis PCC 6803" Biochimica et Biophysica Acta 1319 (1997) 275-282.	
✓	34	PELED, A. et al. "Photobleaching and photodeposition in a chlorophyll based solution" Synthetic Metals 115 (2000) 167-171.	

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RY	35	PLANNER, A. et al. "The influence of rigid matrices on the processes of deactivation of excited ..." Jurnal of PHotochemistry and Photobiology A: Chemistry 115 (1998) 151-155	
	36	RASMUSSEN, K.O. et al. "Nonlinear and stochastic modelling of energy transfer in Scheibe aggregates" Mathematics and Computers in simulation 40 (1996) 339-358.	
	37	SANCHEZ-CORTES, S. et al. "Influence of coverage in the surface-enhanced Raman scattering of cytosine and its methyl derivatives on ..." Surface Science 473 (2001) 133-142.	
	38	SAWICKI, D.A. et al. "Universal relationship between optical emission and absorption of complex systems: an alternative approach" Physical Review A, Vol. 54 No.6, December 19	
	39	SCHMIDT, K.A. et al. "Combined fluorescence and photovoltage studies on ... Photosynthesis Research 58; 43-55, 1998, Kluwer Academic Publishers, Printed in the Netherlands.	
	40	SOMMELING, P.M. et al. "Spectral response and IV-characterizatin of dye-sensitized nanocrystalline TiO2 solar cells" Solar Energy Materials & Solar Cells 62 (2000) 399-410.	
	41	STANGL, R. et al. "On the modeling of the dye-sensitized solar cell" Solar Energy Materials and Solar Cells 54 (1998) 255-265.	
	42	UMETSU, M. et al. "How the formation process influences the structure of ..." Photosynthesis Research 60; 229-239, 1999 Kluwer Academic PUBLishers, Printed in the Netherlands.	
	43	WAGNER, J. et al. "Characterization of Monodisperse Colloidal Particles: Comparison between SAXS and DLS" Langmuir 2000, 16, 4080-4085.	
✓	44	WEETALL, H.H. et al. "Optical and electrical characteristics of bacteriorhodopsin gelatin films and tin-oxide coated electrodes" Current Applied Physics 3 (2003) 281-291.	

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JK	45	YANG, T. et al. "Creating Addressable Aqueous Microcompartments above Solid Supported Phospholipid Bilayers Using Lithographically ..." Anal. Chem. 2000, 72, 2587-2589.	
↓	46	Tamiaki, H. et al "Aggregation of synthetic metallochlorins in hexane. A model of chlorosomal bacteriochlorophyll self-assemblies..." Photosynthesis Research 59-67, 2002.	

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